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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,256

12/14/2005

Holger Thielert

THIELERT 7 PCT

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EXAMINER

UPTON, CHRISTOPHER

ART UNIT

PAPER NUMBER

1724

MAIL DATE

DELIVERY MODE

06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/554,256	Applicant(s) THIELERT, HOLGER	
	Examiner Christopher Upton	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cote et al (2002/0020666).

Cote discloses a membrane bioreactor with both nitrification and denitrification occurring, as claimed. While the reference does not state that it is for coke oven waste water, it is submitted that the source of the wastewater fails to patentably distinguish over the reference, as the process may obviously be used for any wastewater.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onishi et al.

Onishi discloses a membrane bioreactor with both nitrification and denitrification occurring, as claimed. While the reference does not state that it is for coke oven waste water, it is submitted that the source of the wastewater fails to patentably distinguish over the reference, as the process may obviously be used for any wastewater.

4. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Brindle et al article.

Brindle discloses a membrane bioreactor with both nitrification and denitrification occurring, and with temperature control, as claimed. While the reference does not state that it is for coke oven waste water, it is submitted that the source of the wastewater fails to patentably distinguish over the reference, as the process may obviously be used for any wastewater.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 1 above, and further in view of Okey, Mouchet or Davis.

Claim 4 differs from claim 1 in regulation of the air flow in response to a measured parameter. This is well known in wastewater treatment systems, as exemplified by Okey, Mouchet and Davis, and would therefore have been an obvious addition to the references applied to claim 1, to optimize the treatment process.

6. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1 and 3 above, and further in view of Dempsey or Okey.

Claim 6 differs from claim 1 in recitation of regulation of the water flow in response to a sensed parameter. Claim 9 is an independent claim essentially combining the limitations of claims 1, 3 and 6. Regulation of the flow through a bioreactor is well known in wastewater treatment systems, as exemplified by Okey and Dempsey, and would therefore have been an obvious addition to the references applied to claims 1 and 3, to optimize the treatment process.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 1 above, and further in view of Cote et al (5,932,099) or Whiteman.

Claim 7 differs from claim 1 in recitation of a preliminary chemical precipitation step. This is well known in wastewater treatment systems, as exemplified by Cote and Whiteman, and would therefore have been an obvious addition to the process of claim 1, depending on the characteristics of the wastewater to be treated.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Upton whose telephone number is 571-272-1169. The examiner can normally be reached on 7:30-5:00, off every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, consisting of a stylized 'C' followed by a series of loops and a final vertical stroke.

Christopher Upton
Primary Examiner
Art Unit 1724